FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D	D.C. 20549
---------------	------------

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APP	ROVAL								
OMB Number:	3235-0287								
Estimated average burden									
hours per response	: 0.5								

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Name and Address of Reporting Person*     Foley Todd					2. Issuer Name and Ticker or Trading Symbol RHYTHM PHARMACEUTICALS, INC. RYTM ]									5. Relationship of Reporting (Check all applicable)  X Director				10% Owner		
(Last) (First) (Middle) C/O MPM ASSET MANAGEMENT 450 KENDALL STREET						3. Date of Earliest Transaction (Month/Day/Year) 03/26/2020									below	er (give titl /)	e	belov	r (specify v)	$^{\prime}$
I **					4. If <i>i</i>	Line) X Form 1									r Joint/Group Filing (Check Applicable  I filed by One Reporting Person  I filed by More than One Reporting  DO					
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/Yes				ear) if	2A. Deemed Execution Date		ned 3. Transaction		action	4. Securities Disposed Of	d (A) or r. 3, 4 and	5. Amou Securiti Benefici		s ally following	Form:	nership Direct Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)			
								Code	v	Amount	(A) or (D)	Price		Transaction(s) (Instr. 3 and 4)						
Common Stock 03/26/2020					20	s <sup>(1)</sup> 2,300 <sup>(2)</sup> D \$15.04 <sup>(3)</sup> 2,359,463		9,463			See Footno	te <sup>(4)</sup>								
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																				
Derivative Security (Instr. 3)  Conversion or Exercise Price of Derivative Security  Date (Month/Day/Year)  Execution Date, if any (Month/Day/Year)				sansaction de (Instr.  S. Numbe of Derivative Securitie Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			Expiration Date (Month/Day/Year)			Amou Secu Unde Deriv Secu 3 and	rlying ative rity (Instr.	Derivative Security (Instr. 5) Secur Enend Owne Follov Repoi Trans (Instr.		9. Number derivative Securities Beneficial Owned Following Reported Transact (Instr. 4)	e s ally g	10. Ownersh Form: Direct (D or Indire (I) (Instr.	of Ind Bene Owner ot (Insti	Jature direct eficial ership r. 4)		

## **Explanation of Responses:**

- 1. The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person.
- 2. The shares were sold as follows: 2,213 by MPM BioVentures V, L.P. ("BV V") and 87 by MPM Asset Management Investors BV5 LLC ("AM BV5"). MPM BioVentures V GP LLC and MPM BioVentures V LLC ("BV LLC") are the direct and indirect general partners of BV V and BV LLC is the manager of AM BV5. Ansbert Gadicke, Luke Evnin and Todd Foley are the members of BV LLC. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- 3. The price in Column 4 is a weighted average sale price. The prices actually received ranged from \$15.00 to \$15.34. The Reporting Person will provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- 4. Shares are held as follows: 2,271,244 by BV V and 88,219 by AM BV5. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

## Remarks:

/s/ Todd Foley

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- \* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.